ELECTRIC VEHICLE READY ST. LOUIS

St. Louis' new electric vehicle (EV) charging ordinances support EV adoption by requiring new and significantly renovated buildings to build parking areas that support EV charging — with some spaces equipped with EV charging, and others ready to easily and affordably be converted to EV charging stations in the future.



Why EV Charging Ordinances?

- ✓ The City of St. Louis has set an ambitious climate protection goal to reduce greenhouse gas emissions (GHGs) 100% by 2050. Supporting cleaner vehicles results in fewer GHGs, cleaner air and improved public health.
- ✓ By 2030, EVs are projected to reach about 10% of registered vehicles in St. Louis, and could reach up to 30% of vehicles if the City is on track to reach its climate goals.
- ✓ Convenient access to EV charging is one of the most critical factors in people's decisions to purchase an electric vehicle. 80% of charging takes places at home.¹ An EV charging ordinance is critical to making cleaner vehicles more accessible to all, particularly creating more affordable at-home charging.
- ✓ Parking garages and lots last for decades and investing in EV readiness during building construction can result in 75% savings compared with retrofitting later.²

The Benefits of Electric Vehicles for St. Louis

The Challenge with Gas Vehicles



- Vehicles are a major contributor to air pollution in St. Louis, accounting for 91% of carbon monoxide (CO) emissions and 76% of nitrogen oxide (NOx) emissions.³
- Air pollution directly impacts human health, and frequently impacts more vulnerable racial and socioeconomic groups disproportionately.⁴
- 17% of the City's greenhouse gas emissions are from transportation.⁵ Fewer gasoline vehicles will result in fewer vehicle emissions.



 AAA estimates the average annual costs for owning a gas-fueled car to be over \$8,000.6

The Opportunity with Electric Vehicles

- Electric vehicles in Missouri currently emit 33% less greenhouse gas emissions than gasoline vehicles, and emit no harmful tailpipe air pollutants.⁷
- More affordable used EVs are becoming available, and analysts predict new electric cars will cost the same or less than gasoline vehicles by around 2025.8
- EVs are less expensive to operate and maintain, saving the average driver in St. Louis about \$6,800 in fuel costs alone over the vehicle's lifetime.⁹
- As more solar and wind power replace energy from polluting fuels in the electric grid, EVs will become even cleaner. Ameren has established a goal of net zero carbon emissions by 2050.¹⁰







¹ "Charging at Home". U.S. Department of Energy.

[&]quot;Electric Vehicle Charging Infrastructure: Cost-effectiveness." SWEEP.

³ 2017 National Emissions Inventory (NEI) Data. EPA.

⁴ Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure. PNAS.

⁵ St. Louis Climate Action and Adaptation Plan.

⁶ "Cost to Own a Vehicle." AAA.

⁷ "Emissions from Hybrid and Plug-in Electric Vehicles." AFDC.energy.gov.

⁸ Update on electric vehicle costs in the United States through 2030. ICCT.

⁹ "Levelized Cost of Charging Electric Vehicles." NREL.

¹⁰ Integrated Resource Plan. Ameren.

About the City of St. Louis EV Charging Ordinances

Electric vehicle (EV) charging ordinances <u>162</u>, <u>163</u>, and <u>181</u> were passed by the Board of Aldermen in January 2021 and signed into law by Mayor Krewson in February 2021. These ordinances support EV adoption by requiring new and significantly renovated buildings to build parking spaces that can easily and affordably be converted to EV charging stations in the future, and in some cases also requires installation of EV charging stations.

Key definitions





EV Ready: Electrical panel capacity, conduit, and full circuit

EVSE (electric vehicle supply equipment) Installed:

EV chargers installed

Summary of key dates and requirements

	Beginning January 2022			Beginning January 2024		
Single Family	Applies to: • New construction Requires: 1 EV ready space per dwelling unit			 Applies to: New construction Level 3 alterations**, except where parking is more than 50' from the main structure, or has insufficient electrical service capacity. Requires: 1 EV ready space per dwelling unit 		
	Beginning January 2022			Beginning January 2025		
Multi-family Residential	Applies to: New constitution Level 3 alter For a given nu Total # Parking Spaces 5-20 21-49 50+	erations**	ng spaces, requires: EVSE Installed Spaces 0 1 2%*		terations**	eg spaces, requires: EVSE Installed Spaces 0 1 2%*
Non- residential	Applies to: New construction Level 3 alterations** Certain classes of non-residential buildings (see bill for details) For a given number of parking spaces, requires: Total # EV Ready EVSE Parking Spaces Installed Spaces 10-30 1 0 31-49 2 1			No change	1070	

^{*}Percentages will be rounded up.

50+

5%*

2%*

For additional information:

- Contact Plan Review with the Building Division at 314-622-3332
- Ameren has incentives for up to \$5,000 per plug available.
- Visit <u>Electrical Connection</u> to find a trained contractor.







^{**}Level 3 alterations: where the work exceeds 50% of the building area.